



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/985,865	11/06/2001	Mayumi Nagasaki	Q67079	4481

7590 06/28/2005

SUGHRUE, MION, ZINN,
MACPEAK & SEAS, PLLC
2100 Pennsylvania Avenue, N.W.
Washington, DC 20037-3213

EXAMINER

TRAN, NGHI V

ART UNIT	PAPER NUMBER
----------	--------------

2151

DATE MAILED: 06/28/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/985,865

Applicant(s)

NAGASAKI, MAYUMI

Examiner

Nghi V. Tran

Art Unit

2151

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 April 2005.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 8-13 are rejected under 35 U.S.C. 102(e) as being anticipated by Hourunranta et al., U.S. Patent No. 6,704,281 (hereinafter Hourunranta).

3. With respect to claims 8 and 11, Hourunranta teaches an output code amount control method for a multimedia signal coding device [see abstract and figs.5&7], the method comprising:

- coding an audio signal [115];
- coding an image signal [100];
- coding a control signal [130];
- multiplexing the audio, image and control signals to create multiplexed data [120]; and
- transmitting the multiplexed data through control of an amount of image data obtained by coding the image signal and through comparison of said amount

Art Unit: 2151

of image data obtained to predetermined coded data comprising said coded audio and/or coded control signal(s) before or after said multiplexing [fig.5 and col.5, ln.48 - col.6, ln.65].

4. With respect to claims 9 and 12, Hourunranta further teaches obtaining a total amount of data of audio data obtained by coding the audio signal, image data obtained by coding the image signal and control data obtained by coding the control signal; and obtaining a transmission time by dividing the obtained total amount of data with a predetermined data amount per unit time of the multimedia coding device; and controlling an amount of image data on the basis of a comparison of the transmission time with a requested transmission time [col.5, lns.15-27; col.6, lns.15-46; col.4, lns.7-62; and figs.2-6].

5. With respect to claims 10 and 13, the function of controlling the amount of coded image data comprises decreasing the amount of coded image data when the transmission time is longer than the requested transmission time and increasing the amount of coded image data when the transmission time is shorter than the requested transmission time [col.6, ln.15-46].

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

Art Unit: 2151

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1-7 are rejected under 35 U.S.C. 103 (a) as being unpatentable over Applicant's Admitted Prior Art, in the Background of the Invention and Figures 5-6 (hereinafter AAPR), in view of Hourunranta et al., U.S. Patent No. 6,704,281 (hereinafter Hourunranta).

8. With respect to claim 1, AAPR teaches a multimedia signal coding device [fig.5] comprising:

- an audio signal coding unit that codes an input audio signal [511];
- an audio data memory that temporarily stores a coded output of said audio signal coding unit [512];
- an image signal coding unit that codes an input image signal while controlling an amount of output data according to an external control signal [521];
- coded image data memory that temporarily stores a coded output of said image signal coding unit [522];
- a control data processor that processes predetermined data for input control data [531];
- control data memory that stores an output of said control data processor [532];

Art Unit: 2151

- a multiplexer that multiplexes the data stored in said audio data memory, said image data memory and said control data memory [540]; and
- an output code amount controller [550].

However, AAPR is silent on an output code amount controller that generates a control signal for controlling an amount of output data of said image signal coding unit on the basis of the output of said multiplexer through notification of said image coding unit with said generated control signal.

In a multimedia signal coding, Hourunranta discloses an output code amount controller that generates a control signal for controlling an amount of output data of said image signal coding unit on the basis of the output of said multiplexer through notification of said image coding unit with said generated control signal [fig.5].

Therefore, it would have been obvious to one having ordinary skill in the art at the time of the invention was made to modify AAPR in view of Hourunranta by controlling an amount of output data of said image signal coding unit on the basis of the output of said multiplexer through notification of said image coding unit with said generated control signal because this feature enable to adjust its spatial and temporal resolution to meet the target bit-rates set [Hourunranta, col.6, Ins.44-46]. One of ordinary skill in the art at the time of the invention would have been motivated to modify AAPR in view of Hourunranta in order to control of variable-rate bit streams [Hourunranta, col.4, ln.8].

Art Unit: 2151

9. With respect to claims 2 and 5, AAPR is silent on said output code amount controller calculates a total amount of data stored in said audio data memory, said image data memory and said control data memory to obtain a total amount of output data of said image signal coding unit.

In a multimedia signal coding, Hourunranta discloses said output code amount controller calculates a total amount of data stored in said audio data memory, said image data memory and said control data memory to obtain a total amount of output data of said image signal coding unit [see abstract; fig.5; and col.5, ln.16 - col.6, ln.65].

Therefore, it would have been obvious to one having ordinary skill in the art at the time of the invention was made to modify AAPR in view of Hourunranta by obtaining total amount of output data of said image signal coding unit because this feature enable to adjust its spatial and temporal resolution to meet the target bit-rates set [Hourunranta, col.6, lns.44-46]. One of ordinary skill in the art at the time of the invention would have been motivated to modify AAPR in view of Hourunranta in order to control of variable-rate bit streams [Hourunranta, col.4, ln.8].

10. With respect to claims 3 and 6, AAPR is silent on said calculation includes a determination that obtains a data transmission time by dividing the total amount of output data by a predetermined amount of data transmission per unit time of said multimedia coding device, and said output code amount controller determines the amount of output data of said image signal coding unit through comparison of the transmission time with a requested transmission time.

In a multimedia signal coding, Hourunranta discloses said calculation includes a determination that obtains a data transmission time by dividing the total amount of output data by a predetermined amount of data transmission per unit time of said multimedia coding device, and said output code amount controller determines the amount of output data of said image signal coding unit through comparison of the transmission time with a requested transmission time [col.5, Ins.15-27; col.6, Ins.15-46; col.4, Ins.7-62; and figs.2-6].

Therefore, it would have been obvious to one having ordinary skill in the art at the time of the invention was made to modify AAPR in view of Hourunranta by dividing the total amount of output data by a predetermined amount of data transmission per unit time of said multimedia coding device because this feature enable to adjust its spatial and temporal resolution to meet the target bit-rates set [Hourunranta, col.6, Ins.44-46]. One of ordinary skill in the art at the time of the invention would have been motivated to modify AAPR in view of Hourunranta in order to control of variable-rate bit streams [Hourunranta, col.4, ln.8].

11. With respect to claims 4 and 7, AAPR is silent on said determination comprises decreasing the amount of coded image signal data when the transmission time is longer than the requested transmission time and increasing the amount of coded image signal data when the transmission time is shorter than the requested transmission time.

In a multimedia signal coding, Hourunranta discloses said determination comprises decreasing the amount of coded image signal data when the transmission

Art Unit: 2151

time is longer than the requested transmission time and increasing the amount of coded image signal data when the transmission time is shorter than the requested transmission time [col.6, ln.15-46].

Therefore, it would have been obvious to one having ordinary skill in the art at the time of the invention was made to modify AAPR in view of Hourunranta by decreasing the amount of coded image signal data when the transmission time is longer than the requested transmission time and increasing the amount of coded image signal data when the transmission time is shorter than the requested transmission time because this feature enable to adjust its spatial and temporal resolution to meet the target bit-rates set [Hourunranta, col.6, lns.44-46]. One of ordinary skill in the art at the time of the invention would have been motivated to modify AAPR in view of Hourunranta in order to control of variable-rate bit streams [Hourunranta, col.4, ln.8].

Response to Arguments

12. Applicant's arguments with respect to claims 1-11 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

13. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

Art Unit: 2151

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nghi V. Tran whose telephone number is (571) 272-4067. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Zarni Maung can be reached on (571) 272-3939. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


ZARNI MAUNG
SUPERVISORY PATENT EXAMINER